Leu Tyr Ile

## SEQUENCE LISTING

<110> BELMARES, MICHAEL P. LU, PETER S. GARMAN, JONATHAN DAVID JECMINEK, ALBERT A. KHARBANDA, SURENDER AGATA, NAOKI KUFE, DONALD W. <120> MODULATION OF MUC1 MEDIATED SIGNAL TRANSDUCTION <130> ILEX:093WO <140> UNKNOWN <141> 2004-04-12 <150> 60/462,111 <151> 2003-04-11 <150> 60/467,728 <151> 2003-05-02 <150> 60/475,595 <151> 2003-06-04 <150> 60/502,111 <151> 2003-09-11 <150> 60/524,188 <151> 2003-11-21 <160> 190 <170> PatentIn version 3.3 <210> 1 <211> 3 <212> PRT <213> Artificial Sequence <220> <223> DESCRIPTION OF ARTIFICIAL SEQUENCE: SYNTHETIC PEPTIDE <400> 1 Arg Ile Val 1 <210> 2 <211> 3 <212> PRT <213> Artificial Sequence <220> <223> DESCRIPTION OF ARTIFICIAL SEQUENCE: SYNTHETIC PEPTIDE <400> 2

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Arg Lys Lys Arg Arg Gln Arg Arg Arg
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Arg Arg Arg Arg Arg Arg Arg
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<400> 109
Arg Arg Arg Arg Arg
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Arg Arg Arg Arg Arg Arg Arg
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<210> 111
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Arg Arg Gln Arg Arg
1 5
<210> 112
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Gly Trp Thr Leu Asn Ser Ala Gly Tyr Leu Leu Gly Lys Ile Asn Leu
1 5
                                  10
Lys Ala Leu Ala Leu Ala Lys Lys Ile Leu
           20
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<210> 113
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Ala Gly Tyr Leu Leu Gly Lys Ile Asn Leu Lys Ala Leu Ala Ala Leu
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Ala Lys Lys Ile Leu
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Asp Ala Ala Thr Ala Thr Arg Gly Arg Ser Ala Ala Ser Arg Pro Thr

Glu Arg Pro Arg Ala Pro Ala Arg Ser Ala Ser Arg Pro Arg Arg Val

Glu

<210> 115

<211> 27

<212> PRT

<213> Artificial Sequence

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<223> DESCRIPTION OF ARTIFICIAL SEQUENCE: SYNTHETIC PEPTIDE

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Gly Ala Leu Phe Leu Gly Phe Leu Gly Ala Ala Gly Ser Thr Met Gly 10.

Ala Trp Ser Gln Pro Lys Ser Lys Arg Lys Val

<210> 116

<211> 18

<212> PRT ·

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<223> DESCRIPTION OF ARTIFICIAL SEQUENCE: SYNTHETIC PEPTIDE

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Arg Gly Gly Arg Leu Ser Tyr Ser Arg Arg Phe Ser Thr Ser Thr 10

Gly Arg

<210> 117 <211> 16 <212> PRT <213> Artificial Sequence

<223> DESCRIPTION OF ARTIFICIAL SEQUENCE: SYNTHETIC PEPTIDE

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Val Thr Val Val Leu Ala Leu Gly Ala Leu Ala Gly Val Gly 5

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Ala Ala Val Ala Leu Leu Pro Ala Val Leu Leu Ala Leu Leu Ala Pro
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<210> 119
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Lys Leu Ala Leu Lys Leu Lys Ala Leu Lys Ala Ala Leu Lys
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                                 10
Leu Ala
<210> 120
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Arg Arg Arg Arg Asn Arg Thr Arg Arg Asn Arg Arg Arg Val Arg
1 5
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Pro Ile Arg Arg Lys Lys Leu Arg Arg Leu Lys
              5
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<210> 122
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Arg Arg Gln Arg Arg Thr Ser Lys Leu Met Lys Arg
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<210> 123
<211> 18
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Leu Leu Ile Ile Leu Arg Arg Ile Arg Lys Gln Ala His Ala His
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Ser Lys
<210> 124
<211> 7
<212> PRT
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Pro Lys Lys Lys Arg Lys Val
<210> 125
<211> 16
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Lys Arg Pro Ala Ala Ile Lys Lys Ala Gly Gln Ala Lys Lys Lys
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<210> 126
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Cys Met His Ile Glu Ser Leu Asp Ser Tyr Thr Cys
              5
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<210> 127
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Cys Met Tyr Ile Glu Ala Leu Asp Lys Tyr Ala Cys
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<211> 5
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Gly Gly Gly Ser
1 5
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<211> 14
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Glu Gly Lys Ser Ser Gly Ser Gly Ser Glu Ser Lys Val Asp
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<211> 18
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<220>

<223> DESCRIPTION OF ARTIFICIAL SEQUENCE: SYNTHETIC PEPTIDE

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Lys Glu Ser Gly Ser Val Ser Ser Glu Gln Leu Ala Gln Phe Arg Ser

Leu Asp

<210> 131

<211> 72

<212> PRT

<213> Artificial Sequence

<223> DESCRIPTION OF ARTIFICIAL SEQUENCE: SYNTHETIC PEPTIDE

<400> 131

Cys Gln Cys Arg Arg Lys Asn Tyr Gly Gln Leu Asp Ile Phe Pro Ala 10

Arg Asp Thr Tyr His Pro Met Ser Glu Tyr Pro Thr Tyr His Thr His 20 25

Gly Arg Tyr Val Pro Pro Ser Ser Thr Asp Arg Ser Pro Tyr Glu Lys 35 40

Val Ser Ala Gly Asn Gly Gly Ser Ser Leu Ser Tyr Thr Asn Pro Ala 50 55

Val Ala Ala Thr Ser Ala Asn Leu

<210> 132

<211> 68 <212> PRT

<213> Artificial Sequence

<220>

<223> DESCRIPTION OF ARTIFICIAL SEQUENCE: SYNTHETIC PEPTIDE

<400> 132

Cys Gln Cys Arg Arg Lys Asn Tyr Gly Gln Leu Asp Ile Phe Pro Ala 5

Arg Asp Thr Tyr His Pro Met Ser Glu Tyr Pro Thr Tyr His Thr His 20

Gly Arg Tyr Val Pro Pro Ser Ser Thr Asp Arg Ser Pro Tyr Glu Lys Val Ser Ala Gly Asn Gly Gly Ser Ser Leu Ser Tyr Thr Asn Pro Ala 55 Val Ala Ala Thr <210> 133 <211> 7 <212> PRT <213> Artificial Sequence <223> DESCRIPTION OF ARTIFICIAL SEQUENCE: SYNTHETIC PEPTIDE <400> 133 Ala Ala Ala Ser Ala Asn Leu 1 5 <210> 134 <211> 20 <212> PRT <213> Artificial Sequence <220> <223> DESCRIPTION OF ARTIFICIAL SEQUENCE: SYNTHETIC PEPTIDE <400> 134 Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Ala Val Ala Ala Thr 1 5 Ser Ala Asn Leu 20 <210> 135 <211> 20 <212> PRT <213> Artificial Sequence <220> <223> DESCRIPTION OF ARTIFICIAL SEQUENCE: SYNTHETIC PEPTIDE <400> 135 Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Ala Val Ala Ala 5

Ser Ala Asn Leu 20

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Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Ala Arg Gly Asp Arg
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                                      10
Lys Arg Ile Val
<210> 137
<211> 20
<212> PRT
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Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Gln Asp Glu Glu Glu
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Gly Ile Trp Ala
            20
<210> 138
<211> 20
<212> PRT
<213> Artificial Sequence
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Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Ala Val Ala Ala Thr
                5
                                     10
Ser Ile Asn Leu
            20
<210> 139
<211> 20
<212> PRT
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Gly Ile Trp Ala
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  Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Ala Val Ala Ala Thr
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  Gly Ile Trp Ala
  <210> 144
  <211> 20
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  Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Gln Asp Glu Glu Glu
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  Thr Ile Trp Ala
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  <210> 145
  <211> 20
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  <213> Artificial Sequence
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  Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Ala Arg Ser Asp Arg
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                 5
                                     10
  Thr Ile Trp Ala
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Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Ala Arg Ser Asp Arg
Thr Ile Ile Ala
<210> 147
<211> 20
<212> PRT
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Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Ala Arg Ser Asp Arg
               5
                                   10
Lys Arg Ile Ala
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<210> 148
<211> 20
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Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Ser Arg Thr Asp Arg
       5
Lys Tyr Trp Ala
<210> 149
<211> 20
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<400> 149
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Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Gln Asp Glu Glu Glu
        5
                                    10
Gly Ile Trp Ser
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Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Ser Arg Thr Val Arg
Glu Ile Trp Ala
<210> 151
<211> 20
<212> PRT
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Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Ser Val Thr Ser Thr
                5
Ser Ile Asn Leu
            20
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<211> 20
<212> PRT
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<400> 152
Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Ala Arg Gly Asp Arg
              5
Lys Ile Arg Val
           20
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<210> 153
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Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Ala Arg Thr Asp Arg
Lys Val Glu Val
<210> 154
<211> 20
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Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Ala Arg Gly Asp Arg
                5
                                     10
Lys Tyr Ile Val
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<210> 155
<211> 20
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Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Ser Arg Thr Asp Arg
                5
Lys Tyr Gln Ile
<210> 156
<211> 20
<212> PRT
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Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Ala Arg Gly Asp Val
Arg Leu Met Leu
<210> 157
<211> 20
<212> PRT
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Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Ala Arg Gly Asp Arg
                                     10
Lys Val Pro Val
<210> 158
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<400> 158
Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Gln Asp Glu Arg Arg
Leu Ile Val Leu
            20
<210> 159
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<400> 159
Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Ala Arg Gly Asp Arg
                5
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Leu Val Ser Leu
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Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Ala Arg Gly Thr Arg
         5
                                   10
Leu Val Trp Val
     . 20
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Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Ala Arg Gly Asp Arg .
1 5
                                 10
Tyr Arg Ile Val
         20
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<211> 20
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Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Ser Arg Thr Asp Arg
      5
Leu Glu Tyr Val
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<210> 163

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Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Ala Arg Gly Asp Arg
Leu Glu Ile Val
<210> 164
<211> 20
<212> PRT
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<223> DESCRIPTION OF ARTIFICIAL SEQUENCE: SYNTHETIC PEPTIDE
<400> 164
Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Ala Arg Gly Asp Arg
             • 5
                                   10
Thr Ile Ile Tyr
           20
<210> 165
<211> 20
<212> PRT
<213> Artificial Sequence
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Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Ala Arg Gly Asp Arg
               5
                                   10
Arg Arg Ile Val
           20
<210> 166
<211> 20
<212> PRT
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<223> DESCRIPTION OF ARTIFICIAL SEQUENCE: SYNTHETIC PEPTIDE
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<400> 166

Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Ala Arg Gly Asp Arg

Lys Lys Ile Val 20

<210> 167

<211> 20

<212> PRT <213> Artificial Sequence

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<223> DESCRIPTION OF ARTIFICIAL SEQUENCE: SYNTHETIC PEPTIDE

<400> 167

Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Ala Arg Ser Asp Arg

Lys Arg Ile Val

<210>. 168

<211> 20

<212> PRT

<213> Artificial Sequence

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<223> DESCRIPTION OF ARTIFICIAL SEQUENCE: SYNTHETIC PEPTIDE

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Glu Tyr Tyr Val 20

<210> 169

<211> 20

<212> PRT

<213> Artificial Sequence

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<223> DESCRIPTION OF ARTIFICIAL SEQUENCE: SYNTHETIC PEPTIDE

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Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Gly Met Thr Ser Ser 5

Ser Ser Val Val

<210> 173 <211> 18 <212> PRT

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 Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Ala Arg Gly Arg Arg
 Glu Thr Trp Val
<210> 171
<211> 20
<212> PRT
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Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Gln Asp Glu Arg Val
                                     10
Glu Thr Arg Val
<210> 172
<211> 20
<212> PRT
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<400> 172
Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Leu Gln Arg Arg
Glu Thr Gln Val
            20
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<220>

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 Ser Pro Gln Pro Asp Ser Thr Asp Asn Asp Asp Tyr Asp Asp Ile Ser
                                    10
Ala Ala
<210> 174
<211> 19
<212> PRT
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Pro Tyr Gly Thr Ala Met Glu Lys Ala Gln Leu Lys Pro Pro Ala Thr
                5
                                    10
Ser Asp Ala
<210> 175
<211> 19
<212> PRT
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His Lys Ala Glu Ile His Ala Gln Pro Ser Asp Lys Glu Arg Leu Thr
                5
Ser Asp Ala
<210> 176
<211> 20
<212> PRT
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Pro Lys Gln Ala Asn Gly Gly Ala Tyr Gln Lys Pro Thr Lys Gln Glu
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1. 5. 10 15 Glu Phe Tyr Ala 20 <210> 177 <211> 19 <212> PRT <213> Artificial Sequence <220> <223> DESCRIPTION OF ARTIFICIAL SEQUENCE: SYNTHETIC PEPTIDE <400> 177 Ala Ile Ser Gly Thr Ser Ser Asp Arg Gly Tyr Gly Ser Pro Arg Tyr Ala Glu Val <210> 178 <211> 20 <212> PRT <213> Artificial Sequence <220> <223> DESCRIPTION OF ARTIFICIAL SEQUENCE: SYNTHETIC PEPTIDE <400> 178 Leu Asn Ser Cys Ser Asn Arg Arg Val Tyr Lys Lys Met Pro Ser Ile 10 Glu Ser Asp Val 20 <210> 179 <211> 20 <212> PRT <213> Artificial Sequence <223> DESCRIPTION OF ARTIFICIAL SEQUENCE: SYNTHETIC PEPTIDE

Ala Arg Lys Ala Asn Met Lys Gly Ser Tyr Ser Leu Val Glu Ala Gln
1 5 10 15

Lys Ser Lys Val 20

<400> 179

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 Ile Ser Gly Thr Pro Thr Ser Thr Met Val His Gly Met Thr Ser Ser
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 Ser Ser Val Val
 <210> 181
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<212> PRT
<213> Artificial Sequence
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Lys Asp Ile Thr Ser Asp Ser Glu Asn Ser Asn Phe Arg Asn Glu Ile
 1 5
                                   10
Gln Ser Leu Val
           20
<210> 182
<211> 19
<212> PRT
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Thr Thr Asn Asn Asn Pro Asn Ser Ala Val Asn Ile Lys Lys Ile Phe
     5
Thr Asp Val
<210> 183
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<400> 183

Thr Arg Glu Asp Ile Tyr Val Asn Tyr Pro Thr Phe Ser Arg Arg Pro 5

Lys Thr Arg Val 20

<210> 184

<211> 19

<212> PRT <213> Artificial Sequence

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<223> DESCRIPTION OF ARTIFICIAL SEQUENCE: SYNTHETIC PEPTIDE

<400> 184

Ser Ser Ala Lys Ser Ser Asn Lys Asn Lys Asn Lys Asp Lys Glu 10

Tyr Tyr Val

<210> 185

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> DESCRIPTION OF ARTIFICIAL SEQUENCE: SYNTHETIC PEPTIDE

<400> 185

Thr Ser Gly Thr Gly His Asn Gln Thr Arg Ala Leu Arg Ala Ser Glu

Ser Gly Ile

<210> 186

<211> 19

<212> PRT

<213> Artificial Sequence

<223> DESCRIPTION OF ARTIFICIAL SEQUENCE: SYNTHETIC PEPTIDE

<400> 186

Gln Gly Asp Pro Ala Leu Gln Asp Ala Gly Asp Ser Ser Arg Lys Glu 5

Tyr Phe Ile

<210> 187

<211> 20

<212> PRT

<213> Artificial Sequence

<223> DESCRIPTION OF ARTIFICIAL SEQUENCE: SYNTHETIC PEPTIDE

<400> 187

Ser Val Phe Ser Ile Pro Thr Leu Trp Ser Pro Trp Pro Pro Ser Ser

Ser Ser Gln Leu 20

<210> 188

<211> 19 <212> PRT <213> Artificial Sequence

<220>

<223> DESCRIPTION OF ARTIFICIAL SEQUENCE: SYNTHETIC PEPTIDE

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Lys Asp Ser Arg Pro Ser Phe Val Gly Ser Ser Ser Gly His Thr Ser 5 10

Thr Thr Leu

<210> 189

<211> 20

<212> PRT

<213> Artificial Sequence

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<223> DESCRIPTION OF ARTIFICIAL SEQUENCE: SYNTHETIC PEPTIDE

<400> 189

His Asp Phe Arg Arg Ala Phe Lys Lys Ile Leu Ala Arg Gly Asp Arg 5 10

Lys Arg Ile Val 20

<210> 190

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<212> PRT

<213> Artificial Sequence

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<223> DESCRIPTION OF ARTIFICIAL SEQUENCE: SYNTHETIC PEPTIDE

<400> 190

Ser Thr Asp Asn Leu Trp Arg Pro Phe Met Asp Thr Leu Ala Ser His 1 5 10 15

Gln Leu Tyr Ile 20